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WHY 250,000 CHILDREN QUIT SCHOOL

THE YEARLY ARMY THAT DROPS OUT OF LINE—STANDARDS TOO HIGH AND TEACHING TOO DULL

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Why 250,000 Children Quit School

Last June an army of 250,000 boys and girls, about fourteen and a half years old, marched from the city public schools of America, proudly bearing the evidence of having completed successfully the eight years of study. During that month and the months preceding there dropped from the ranks another army of 250,000 children who had failed of graduation. They were of about equal age and had spent about the same length of time in school as their more fortunate schoolmates. The larger fraction of these 250,000 educational failures had completed only six of the eight years in the course of study.

Note.—Three years ago the Russell Sage Foundation commissioned Dr. Gulick and Dr. Leonard P. Ayres to collect the facts about children who quit school. With the co-operation of Superintendent Maxwell an intensive study was made of the records of 40,000 children in New York City. The extensive studies covered the records of over 2,000,000 children in 80 cities. The conclusions reached are set forth in this article.—The Editors.

This is our great educational problem. It transcends in importance all questions as to the method and scope, content or intent, for the first thing to do is to get the children to attend school.

The whole theory of democracy is built on the assumption that the voters shall be intelligent. The last two years of the elementary schools contain the studies basal to intelligent citizenship—United States history, civics, commercial geography, etc.

Our school systems have accomplished the first task given to them. They have in less than a century reached the point where all the pupils do actually get a working knowledge of the fundamentals of an intelligent life, namely, the ability to read the daily papers, to write, to do such operations with figures as are involved in daily financial transactions. This has never been done before in the history of the world. Heretofore the bulk of the world got what education it secured in the home. In a single century the world has developed a social instrument which actually does this fundamental and world-changing thing—that is, puts the "three R's" into the possession of all.

We in the United States are making a new demand of our schools. The pupils must learn the fundamental facts necessary to intelligent citizenship. Because of the decay of the apprenticeship system we may have to include vocational training in the schools; but, whether this is to come or not, it is necessary for all to become intelligent citizens.

The last two years of the course are by all odds the most valuable years. In a certain sense the first years are but preparatory to the last two years. During the first years the pupil has been mainly acquiring the tools of education. During the last two years he learns more about applying these tools than he does during the whole first six years. In such subjects as commercial geography he will get light upon the activities of all our people. The study of how our country is governed-civics-is basal to intelligent citizenship. The study of United States history has been parenthetical and inadequate during the preceding years. During the last two years it is comprehensive and consecutive. This tragedy, therefore, of the bulk of the children who fail of graduation is that they succeed

in accomplishing no more than the first six years of the course.

How, then, may we save this army of 250,000 children who drop out of school without completing the last two years of the course? I use the word "save" deliberately, for a large fraction of these 250,000 children drop out of school because they have failed. They are humiliated, their confidence in their own ability is destroyed, and the souldestroying conviction is ground into them that they are "failures," "stupid," "dumb," or "backward."

My point of view is that of the non-technical business man who discovers that his factory is finishing up only 50 per cent. of its raw material. He wants to know what is the matter, and particularly how to stop this 50 per cent. of loss.

This article is written in the belief that there are at least four great underlying sources of loss which belong in varying degrees to all the schools in all parts of the country, both urban and rural, north, south, east, and west. It is true that the problem of the rural schools is different from the problem of the city schools, that the standards of the licens-

ing of teachers varies greatly in the different states, that the general intelligence in different communities varies considerably, that the courses of study are widely variant, and that there are many other factors which render the problem complex.

Taking all this into account, however, there appear to be at least four great sources of loss:

- I. Losses from the ranks, due to the lack of adjustment between the length of the compulsory education period and the length of the school course.
- 2. Losses due to preventable ill health or to removable physical defects.
 - 3. Losses due to irregular school attendance.
- 4. Losses due to the fact that the courses of study are either too difficult or not adapted to the average pupil. The school machinery is such that every facility is given children to go more slowly than the average, and but little opportunity to go faster than the average.

I take these up seriatim:



Six-Year Laws with Eight-Year Courses



SIX-YEAR LAWS WITH EIGHT-YEAR COURSES

In most of the states the law requires six years or less of school attendance, and yet the elementary course in most American states involves eight grades with a year apiece. So we have a six-year law with an eight-year school. In several states the law appears to require eight years, but in reality demands only six. For example, in Massachusetts the law requires the child to attend school from the age of eight to sixteen, but excuses him at fourteen if he has regular employment at home or elsewhere. The states demanding eight full years of schooling are Maine, Michigan, Minnesota, and Washington.

There are two factors basal to the length of the elementary school course. Upon these facts the duration of the compulsory education period should be established. These are: first, at what age is it best that a child should enter school; and second, at what age should pupils graduate from the elementary school?

Under existing conditions it appears that, on the

average, children who enter school at six or seven do better for themselves and the school than those who enter at any other age. We have long been told that children who enter school at eight would be advanced enough mentally soon to catch up with, if not to pass, those who enter at six. The study of 40,000 children's records by my associate, Dr. Leonard P. Ayres, to whom I am indebted for all the data in this article, does not support this claim. Children who enter at eight or nine do progress faster than those who enter at six or seven, but not enough faster to make up for their handicap. More children graduate who enter at six and seven than who enter at eight and nine. Under present conditions, then, children should begin school when they are six or seven years old.

Children should graduate at fourteen or fifteen. A change ought to and does come over children at that time which demands a less maternalistic environment than that of the elementary school. They are gripped by a new spirit of energy and independence which demands either the larger liberty of the high school or the obligations of

business. Even the best of children are restless and unsuited in the elementary school after fourteen. With a wonderful uniformity the average age of leaving school ranges from fourteen to fifteen all over the country. This is true whether they have graduated or not, whether they are native born or foreign born, white or black, whether the course of study is easy or hard, or even whether the teachers and teaching equipment are good or bad.

It is a great biological fact which we are dealing with. When the wings of the nestling are grown it leaves the nest. The same kind of force drives children out of the elementary school soon after they are fourteen. The elementary form of school is suited to children but not to adolescents. This is the first reason why children drop out of school at fourteen, no matter in what grade or part of the country they are.

The first thing that we need, then, is a compulsory attendance law, without "jokers" or exceptions, which shall require children to begin school at six or seven and stay in school for eight years.



Why Children Leave School



WHY CHILDREN LEAVE SCHOOL

Why do half of the children drop out of school before graduating? Sixteen per cent. of all who drop out do so because of ill health; and those who have physical defects, such as poor hearing, poor seeing, hypertrophied tonsils, adenoids, or decayed teeth, progress through school 9 per cent. more slowly than children who are not so handicapped.

Suppose that a child is somewhat deaf and so does not learn enough of what is going on to do well. He fails and has to repeat the first grade. After it is discovered that he is deaf, a seat in the front row is always given him. He makes no more failures. He entered school at seven, at nine he entered the second grade, at ten the third, at eleven the fourth, at twelve the fifth, and at thirteen the sixth. There seems to be no question about the general truth of these figures. The chances are good that this boy will drop out of school. If he is followed by the school officer it will be shown that the boy is already in his four-

teenth year, and that he will drop out on his fourteenth birthday anyway without completing the year. The result is that he is out either then or on his fourteenth birthday. He reasons that he cannot hope to graduate, for that will take him till he is sixteen, so he had better drop out at once.

Medical inspection as already carried on in many places will detect all these cases before they have failed, and an efficient "follow-up" system will see that the defects are removed. It is wasteful to the state and inhuman to the child to have his progress in school blocked because he has some removable defect that prevents his seeing, hearing, breathing, or chewing. Children with bad teeth are, on an average, six months behind those in school with good teeth. Purely on the basis of economy, it is cheaper to have the teeth of these children filled than it is to pay for the extra six months' instruction or to have the children drop out of school with a year less of education than they otherwise would have had.

Now about the 16 per cent. who drop out because of ill health. Adequate attention to a few simple matters will remove most of this.

- 1. Medical inspection can stop the school's being a means of spreading measles, scarlet fever, and diphtheria.
- 2. No matter what the system or lack of system of ventilation, every window in the building could be opened for three minutes every period, or at least every hour. During this time the pupils should march around, sing, dance, and do exercises. Change of temperature is as important as purity of air, and moving around every little while is essential to good work. The method of opening the windows and taking exercise all at once avoids disturbing the balance of circulation in a pressure system of ventilation, and avoids the evil of noise.
- 3. The building and pupils must be clean. Send the children home if they smell, and clean the building by the vacuum system. In most schools a cloud of dust rises about three feet from the floor when the children run or dance on it. No wonder that they have colds. The school building could and should be as clean as a hospital, and for the same reasons. These three steps will largely prevent losses from illness.

Here are two largely preventable leaks in our school systems:

- 1. About 16 per cent. of those who drop out do so because of ill health.
- 2. Those having removable physical defects make 9 per cent. slower progress than they should.

To Stop the Leakage



TO STOP THE LEAKAGE

Another great leak in our school systems is due to intermittent attendance. The facts found by studying the records of all American cities which give in detail information about the regularity of attendance of their school children, are the following:

Three children out of four attend school regularly, that is, more than three-fourths of the time. One child out of four attends school irregularly, that is, less than three-fourths of the school year. It is not to be expected that a child can master the work of a grade well enough to be promoted in less than three-fourths of the time.

London, England, and a good many American smaller cities have almost stopped this leak in the school system. It is accomplished by two steps efficiently taken:

- 1. A school census which accurately locates every child of school age in the community.
- 2. Adequately administered school laws, so that all who are not in school are immediately followed up.

There are at present many children who do not go to school simply because the city has no knowledge of their existence. They have never been registered in school. A child moves to another part of the city, takes his transfer slip, and it may be a month before he appears at the new school. Many children stay away from school for a month or so after school has begun; many drop out a week or two before the Christmas holidays and do not come back till a week or two after. Many, especially boys, drop out late in May or early in June.

Prompt following up of these cases in communities where it has been tried always results in establishing the habit of regular attendance the whole school year. Every child who is not keeping up because of intermittent attendance or any other cause tends to hold the entire class back and to absorb an undue proportion of the time of the teacher. High Standards versus Good Standards



HIGH STANDARDS VERSUS GOOD STANDARDS

At present our courses of study are not fitted to the abilities of the average pupil, but to those of the unusually bright one. In an investigation in New York City it was found that for every child making rapid progress through the grades there were eight who made slow progress. Last year, in a Massachusetts city, for every one making rapid progress there were twenty-one making slow progress. In a large city in Pennsylvania the slow pupils are fourteen times as numerous as the rapid ones. In five other cities in different parts of the country the slow pupils are from ten to one hundred and fifty times as numerous as the rapid ones. The condition is general if not universal. It is probably a most conservative statement to say that in the average city there are at least ten times as many children making slow progress as there are making rapid progress.

I know that the difficulty in making up a grade once lost lies not mainly in the course of study but in our lack of school machinery adapted to help the pupil to regain a lost grade or to gain a grade. But the large number who lose grades shows that the course of study or the promotion conditions must be changed. The essential and the only essential condition for promotion should be the attainment of such knowledge and skill as will permit of the next grade being understood. This involves in most years only a fraction of the whole work covered. Arithmetic is almost the only subject that is so consecutive that one year's work absolutely depends on that of the previous year. And even here the essentials are addition, subtraction, multiplication, division, fractions, and percentage. It is less expensive and more humane to give special help to a child that he may be promoted than it is to degrade him with all the loss to the individual, the school, and the community which is involved.

The objection raised is that this means lowering the standards. A high standard is one which secures the best and most effective and successful work from the pupil. Those standards are vicious and low which promote failure and discouragement. I know one teacher who for years has "failed" over half of each successive class by so-called "high standards." That woman is responsible for the termination of the school career of hundreds of boys and girls who average up well both in effort and mental power. The trouble is with the standard. A man teaching boys to jump, who should put the stick at such a height that a considerable number failed and stopped trying, would not be regarded as maintaining high standards. It is his business to teach boys to jump—not to discourage them so that they will leave the field.

This army of failure, consisting of the 250,000 children who each year leave our city schools, having failed of graduation, may be largely recruited into the army of success, those who graduate, by four measures:

- 1. Having a genuine eight-year compulsory school law for the eight-year school.
- 2. Having medical inspection of school children with adequate "follow-up" work by school nurses or teachers. This brings the rate of progress of

the children having defects up to the normal. Adequate hygienic supervision of the school and its work largely does away with the 16 per cent. of those who drop out because of ill health.

- 3. A complete school census and an adequate administration of attendance officers cut down all failures due to the fact that 25 per cent. of the children now attend school but three-quarters of the time.
- 4. The course of study and school machinery must be so adapted to the average that as many will go faster as go slower than the mass.

In a school system with 1,000 pupils entering each year and 83 per cent. promoted each year, there will be 830 who complete the first grade in one year; of this number, 689 will go through the second grade in one year, 572 the third, 475 the fourth, 393 the fifth, 326 the sixth, 271 the seventh, and 225 will graduate without having failed. A few will go faster than this, and about 250 will keep on in spite of one or more years of failure, so that eventually about 500 will be graduated each year. These are the present conditions in American city schools. In those systems that have

changed these promotion rates to 95 per cent. or better, the figures are as follows:

950 complete the first year without failure 903 complete the second year without failure 858 complete the third year without failure 815 complete the fourth year without failure 774 complete the fifth year without failure 735 complete the sixth year without failure 698 complete the seventh year without failure 663 complete the course without failure.

And it would be reasonable to expect that those who continue in spite of having failed only once in their course will nevertheless graduate. This will give a total of 941—that is, 94 per cent.

These four measures do not increase the total expenditure for instruction in any respect. They decrease, not increase, the number of children in school at any one time, for children are promoted and graduated promptly. They give 94 per cent. of the children the important studies in the two upper years of the course, while at present only one-half of the children get these studies.

These measures stop the "blocking" in the lower grades, raise the health and efficiency standards of the whole body of pupils and teachers, and tend to establish the habit of success rather than the habit of failure in the pupils. This is of greater importance than anything in the course of study. It sends the children out into the world with hope rather than with discouragement.

The accomplishment of this result, the conversion of the army of failure into an addition to the army of success, is the second great achievement of the American city schools.



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